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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,710	02/06/2002	Anees Narsinh	45390/JEC/X2/134069	9204

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EXAMINER

HSU, ALPUS

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,710

Applicant(s)

NARSINH ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. In view of the Appeal Brief filed on 26 July 2004, PROSECUTION IS HEREBY REOPENED. A non-final office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The arguments regarding the final rejection(s) of claim(s) 1-23 under 35 USC 103(a) have been fully considered and were persuasive. Therefore, the final rejection is hereby withdrawn by the examiner. However, upon further consideration, a new ground(s) of rejection is made in view of specification disclosure, LUIJTEN et al. and JONES.

3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The **congestion control mechanism** in combination with the first set of classification information (i.e. priority associated with each packet) to further classifying the admitted packet to generate a second set of classification before being forwarded to a destination address is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In claim 1, lines 9-16, it is only the first set of classification data used to further classify the admitted packet to generate a second set of classification before being forwarded to a destination

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address which is inconsistent with the disclosure for enablement. To be more specific, in the disclosure, page 5, line 5, line 26 to page 6, line 2, it recites: "The packet switching controller preferably receives the admitted packets forwarded by the access controller, classifies the packets, and queues them for downstream congestion control. If the admitted packets are to be forwarded to their destination address based on the **congestion control mechanism** at the switching controller, the packet switching controller modifies the packets in accordance with flow information and transmits the modified packets on a switching mechanism", page 10, lines 16-21, it recites: "The packet switching controller receives the admitted packets and engages in further classification of the packets. The admitted packets may be classified for determining their priority, and recommended to be dropped or forwarded to their destination address based on the **classification information and congestion** at the switching controller level". Claims 1-8 are rejected for the non-enablement since it omits the critical or essential element of congestion control mechanism in combination with the first set of classification information (i.e. priority associated with each packet) to further classifying the admitted packet to generate a second set of classification before being forwarded to a destination address, which was clearly shown in the disclosure as indicated above.

4. Claims 6 and 7 recite the limitation "the congestion status data" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 5-9, 12-15, 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by LUIJTEN et al. in US Patent Application 2001/0021174 A1.

Regarding claim 1, LUIJTEN et al. discloses a data communication node (10) comprising an access controller (19, 40, 60) for receiving an inbound packet ([0026], lines 1-3), classifying the packet wherein a first set of classification information (grant information GR) is generated ([0026] lines 4-9, [0028], lines 1-3), and admitting the packet classified by the access controller into the node based on the first set of classification information ([0027], lines 1-8); and a switching controller (25) coupled to the access controller, for receiving the admitted packet from the access controller ([0021], lines 1-9), further classifying the admitted packet wherein a second set of classification information is generated ([0050], lines 1-4, 10-13, 18-21), and forwarding the packet classified by the switching controller to a destination address based on the second set of classification information ([0021], lines 1-9).

Regarding claim 5, LUIJTEN et al. discloses a buffer (11) for storing the admitted inbound packets.

Regarding claims 6-8, LUIJTEN et al. discloses the access controller admits and discards the inbound packet based on the comparison of the predetermined threshold level or discard probability ([0029], lines 15-28, [0032], lines 3-19).

Regarding claim 9, LUIJTEN et al. discloses an access controller (19, 40, 60) in a data communication node (10) comprising an input (1) for receiving an inbound packet, a classification engine (40) for classifying the inbound packet, a buffer (19) for storing admitted inbound packet, and a disposition engine (60) for receiving classification information and

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determining whether the inbound packet is to be admitted based on a utilization level of the buffer determined from the classification information, and delivering the inbound packet to a switching controller (25) if the packet is admitted.

Regarding claims 12-14, LUIJTEN et al. discloses the access controller admits and discards the inbound packet based on the comparison of the predetermined threshold level or discard probability ([0029], lines 15-28, [0032], lines 3-19).

Regarding claim 15, LUIJTEN et al. discloses a method for packet traffic management in a data communication node including an access controller and a switching controller, comprising: at the access controller: receiving an inbound packet ([0026], lines 1-3), classifying the packet wherein a first set of classification information (grant information GR) is generated ([0026] lines 4-9, [0028], lines 1-3), determining congestion status data from the classification data ([0029], lines 10-20), admitting the packet classified by the access controller into the node based on the first set of classification information ([0027], lines 1-8), delivering the admitted packet to the switching controller ([0022], lines 8-15); and at a switching controller, determining whether the admitted packet is to be forwarded to a destination address ([0021], lines 1-9).

Regarding claim 19, LUIJTEN et al. discloses further step of storing the admitted inbound packets in a packet buffer (19).

Regarding claims 20-23, LUIJTEN et al. discloses the access controller admits and discards the inbound packet based on the comparison of the predetermined threshold level or discard probability ([0029], lines 15-28, [0032], lines 3-19).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2-4, 10, 11, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over LUIJTEN et al. in US Patent Application 2001/0021174 A1 in view of JONES in US Patent No. 6,590,901 B1.

Regarding claims 2 and 16, LUIJTEN et al. differs from the claims, in that, LUIJTEN et al. does not disclose a specific access controller being a media access controller, which is well known in the art and commonly used for data access control purpose. JONES, for example, from the similar field of endeavor, teaches the use of media access controller for data access control as claimed, which can be easily adopted by one of ordinary skill in the art into the system and method of LUIJTEN et al. to provide media access control to further improve the system controllability.

Regarding claims 3, 4, 10, 11, 17 and 18, LUIJTEN et al. differs from the claims, in that, LUIJTEN et al. does not disclose the feature of including a priority associated with the inbound packet in the first set of classification information, and giving different precedence in admitting

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packets associated with different priorities, which are also well known in the art and commonly applied in communications field for prioritized data flow control purpose. JONES also discloses the feature of including a priority associated with the inbound packet in the first set of classification information, and giving different precedence in admitting packets associated with different priorities (col. 9, lines 5-12, col. 10, lines 1-9), which can be easily adopted by one of ordinary skill in the art into the system and method of LUIJTEN et al. to provide prioritized data flow control to further improve the system efficiency.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rogers is additionally cited to show the feature of network switch with packet scheduling utilizing packet classifier, memory and switching controller similar to the claimed invention.

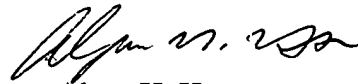
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH



Alpus H. Hsu
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